

The Recyclability of Post-Consumer Polypropylene (PP)

RECOUP Statements

- PP is one of the two most common plastic types used in producing consumer pot, tub and tray packaging. There are also a small number of plastic bottles manufactured from PP.
- From the 175kt of post-consumer plastic pots and trays collected for recycling in 2017, an estimated 35% or 61kt is PP.
- There are PP reprocessors in the UK and Europe and it can be recycled into a wide range of products.
- PP is currently the most valuable element within the post-consumer pot, tub and tray fraction. The markets for PP accept a mix of colours which means different colours do not need separating out before recycling.
- Some PP is used for food contact packaging, but PP pots and trays cannot currently be recycled back into food contact packaging again in a practical or commercially viable way.

Evidence and References to Support Statements

- Collection data is referenced from the RECOUP annual collection survey.
- Composition of pots and trays taken as an average from a range of published reports plus unpublished UK MRF and PRF data made available to RECOUP.
- UK recycler 1 – Once baled, good quality sorted PP pots, tubs and trays have a market value of £200 - £250 per tonne. We reprocess this type of material into a high quality PP regrind which is sold into a range of applications and has a market value currently over £500 per tonne.

- UK recycler 2 - Post-consumer PP has a value, there is market demand, and it is the highest value / polymer with the most established recycling value chain within the post-consumer pot and tray mix (subject to normal quality requirements). Bale prices are £220 or more per tonne, and flakes have a market value of over £500 per tonne.
- UK recycler 3 –We currently buy several thousands of tonnes per year of post-consumer PP for reprocessing in the UK and it is utilised in many end product categories including Automotive, Construction, Packaging and Horticultural. Baled post-consumer PP is widely reprocessed throughout the world and has become a key feedstock for the plastics reprocessing industry with demand outstripping supply for several years. In the UK It has historically had a positive value between £150 and £250 per tonne (for bales) and a flake value between £350 and £500 per tonne. We support the continued & expanded use of PP in rigid household packaging applications as its use has proved highly sustainable and led to the decline in use of lower volume, commercially non-viable materials.
- UK waste management company 1 - Polypropylene is recyclable. What makes a polymer recyclable is the successful combination of its collection and sorting, but also the existence and strength of its end markets: someone needs to buy the material to give it a new life. And there are very good end markets for both clear and coloured PP. The industry wants to use recycled PP, it has got a value and thanks to recycled PP, less virgin material is used.
- UK waste management company 2 - We are seeing increasing demand for recycled PP from packaging sources and have invested accordingly in PP recycling for such grades which are being sold back in to a number of moulding applications such as crates, containers, furniture and pails.

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